

Pods were noticed with a series of holes in them. The birds appeared to avoid the green, fresh pods and concentrated on the drier dark pods. Curious to find out what was attracting the birds to the pods, I collected some and broke them open. I discovered tiny larvae in two of the pods. I handed over these specimens to Dr. George Mathew, Entomologist, Kerala Forest Research Institute, Peechi, who reared them and found them to be larvae of a micro-lepidopteran species, which could not be identified. This indicated that the birds were not pecking at the pods for their pith, as I had earlier suspected.

Ganguli (1975) had earlier reported that Mahratta woodpeckers had made holes in all the dry *Cassia fistula* pods in her garden in New Delhi, but was not sure if it was for the pith or

for insects. Balasubramanian (1991) had reported redvented bulbuls (*Pycnonotus cafer*) pecking at pods of *Cassia fistula* at Point Calimere and suggested they did so to feed on the pulp of the pods.

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11. DRUMMING FREQUENCY IN WOODPECKERS

Drumming is extensively used by woodpeckers in the social context, to announce their territories and locate potential mates (Short LL. 1982 WOODPECKERS OF THE WORLD, Delaware Museum of Natural History). However, as most species maintain territories round the year, they may resort to this instrumental signalling throughout the year. I have recorded the drumming of woodpeckers at my study site in Peechi Vazhani Wildlife Sanctuary from September 1991 to May 1992 (see Table 1).

The table shows the number of days on which drumming was recorded. From this, it is evident that the large goldenbacked woodpecker (*Chrysocolaptes lucidus*) and rufous woodpecker (*Celeus brachyurus*) were the most consistent drummers, followed by pygmy woodpeckers (*Picoides nanus*), in terms of total number of days

TABLE 1

DRUMMING FREQUENCY OF WOODPECKERS IN DIFFERENT MONTHS

Month	Days	PY	MA	HS	YN	SB	RU	GB	MG	UN
Sep.	21	2	-	2	1	1	2	-	9	8
Oct.	21	1	-	-	-	-	2	1	13	5
Nov.	11	1	-	-	-	-	2	-	3	5
Dec.	22	5	4	-	-	-	7	1	3	3
Jan.	31	6	3	-	-	-	1	3	2	16
Feb.	22	2	3	-	-	2	6	1	7	2
Mar.	23	2	3	-	-	2	-	-	4	12
Apr.	22	1	-	-	-	2	2	4	9	4
May	22	-	-	-	-	2	2	3	6	9
Total	195	20	13	2	1	9	24	13	56	64

PY : *Picoides nanus* SB : *Picus xanthopygaeus*  
 MA : *Picoides mahrattensis* RU : *Celeus brachyurus*  
 HS : *Hemicircus canente* GB : *Dinopium benghalense*  
 YN : *Picus chlorolophus* MG : *Chrysocolaptes lucidus*  
 UN : Unidentified

and months in which drumming was recorded. Two species - Mahratta (*Picoides mahrattensis*) and little scalybellied (*Picus xanthopygaeus*) woodpeckers appeared to concentrate their drumming activities in their respective breeding seasons.

Though distinct in some species, drumming is similar for several species and at times indistinguishable. This accounts for a good number of drummings that could not be identified to the species level. For two species - heartspotted woodpecker (*Hemicircus canente*) and lesser yellownaped woodpecker (*Picus chlorolophus*), fewer instances of drumming were recorded. In the heartspotted, I have reported elsewhere that drumming is not common and is perhaps substituted by duetting calls. It is also possible that some of the low volume drumming was missed due to poor audibility. Yet the drumming of the pygmy woodpecker, which is brief and inaudible at a distance, was recorded quite frequently.

On two occasions, I came across two species of woodpeckers engaged in long bouts of drumming. Firstly, on January 13, 1992, a pygmy woodpecker was noticed drumming on a dead branch of *Grewia tilaefolia* from 1146 - 1203 h,

with a brief interval of 2 minutes for preening. For a period totalling 4 minutes 25 sec, I recorded 72 bouts of random drumming and for the entire session, the bird could have drummed 243 times. On several other occasions, I have heard the birds drumming more briefly, about 5-20 times each. The second occasion concerns the Mahratta woodpecker, which drummed for a period of 14 minutes (1013-1027 h) on March 16, 1992, on a dead teak (*Tectona grandis*) branch. Random counts for a period of 5 minutes showed the bird drumming on 69 occasions and for the total period the bird could have drummed 196 times.

Short (*Ibid.*) says that longer bursts of drumming could be heard during the time that birds are establishing territories or while engaged in courtship, when a new mate is being attracted.

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## 12. RANGE EXTENSION OF THE GREEN SHRIKE-BABBLER *PTERUTHIUS XANTHOCHLORIS* IN PAKISTAN

The green shrike-babbler *Pteruthius xanthochloris* occurs in Himalayan moist broad-leaved and mixed coniferous forest, seasonally between 1,200 m and 3,000 m (Roberts 1992). Ali and Ripley (1972) and Inskipp and Inskipp (1985) state that the species occurs eastwards from the Murree Hills, Punjab, Pakistan to Arunachal Pradesh. Roberts (1992) notes that the western limit of the species' range is based solely on a breeding record from the Murree Hills at 2,400 m in July 1900. There have been no subsequent records of green shrike-babbler from the Murree Hills and Roberts (1992) speculates

that the species is extinct there, summarising that the species is "rare" in Pakistan.

During January 28-30, 1995, we spent two days birdwatching in the Murree Hills between Dunga Gali and Murree town. On January 29 we were in the Dunga Gali area at approximately 2,200 m altitude. Mixed flocks of birds, largely comprising of tit species Paridae, goldcrests *Regulus regulus*, and white-cheeked nuthatches *Sitta leucopsis*, were frequently encountered foraging in the open, mixed forest. At 1230 h we stopped to watch an orange bullfinch *Pyrrhula aurantiaca* amongst one such flock. As the birds